

# Policy development and implementation in health promotion—*from theory to practice: the ADEPT model*

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## SUMMARY

*There is a growing interest among health promotion researchers to better understand and influence the policy process. However, at this point in time, theoretical concepts enabling researchers to do so are still rare and underused, suggesting a need for new, easy-to-use concepts to explain successes or failures of health promotion policies. This article presents the ADEPT (Analysis of Determinants of Policy Impact) approach, which aims to explain and influence policy development and policy impact implementation with four determinants: goals, obligations, resources and opportunities. ADEPT provides a detailed operationalization for both quantitative and qualitative use. An empirical test of the ADEPT model using a quantitative survey of*

*719 policy-makers from four health promotion policy fields and six European nations indicated that both policy outputs and policy outcomes are influenced by the four determinants. The approach has, in the meantime, been successfully utilized to analyze and initiate policy development in a number of health promotion projects. Despite a number of limitations, ADEPT provides an easy-to-use, theory-based and parsimonious tool for understanding and influencing policy processes in health promotion. Moreover, as it identifies potential 'levers of influence' and can easily be connected to existing methods of community development or capacity building, it is a particularly powerful tool for policy development.*

*Key words:* policy development; policy and implementation analysis; model; organization development; knowledge transfer

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## INTRODUCTION

Recently, there has been a growing interest among researchers in how to better understand policy development and implementation in health promotion. This interest may be rooted in ambivalent perceptions of policy processes: In theory, public policies are perceived to be an ideal tool for the promotion of healthy lifestyles (WHO, 1986), but in practice, this often fails to be the case (Bellew *et al.*, 2008). Of particular interest are theoretical concepts that first of all allow health promotion researchers to make sense of processes of policy development and

implementation and that secondly might also help them find means to influence such processes for the purpose of health promotion. At this point in time, however, the utilization of such approaches in health promotion seems to be rather limited. For example, in their review of research papers on health promotion policy, Breton and De Leeuw (forthcoming) find that only 39 out of 591 articles investigated actually used at least some kind of theoretical approach.

Most of the theoretical approaches that are currently utilized to explain policy processes either come from the disciplines of public health or political science. In public health,

RE-AIM (Glasgow *et al.*, 1999), Health Impact Assessment (Snowdon *et al.*, 2010) and Knowledge Translation (Canadian Institutes of Health Research [CHIR], 2010) are established theoretical approaches utilized for the development and implementation of public policies. RE-AIM is primarily focused on the dissemination of public health interventions on the individual level, although some efforts have been made to incorporate system level factors in the approach. The main objective of Health Impact Assessment is the development of evidence-based recommendations for policy-makers and stakeholders. Knowledge Translation, in contrast, puts the focus on the complex interaction between researchers and knowledge users, for the purpose of developing and implementing public policies.

In political science, a number of theoretical approaches are utilized to explain policy processes (Sabatier, 2007). For example, the advocacy coalition framework (ACF) (Sabatier and Jenkins-Smith, 1988, 1993; Sabatier, 2007) focuses on coalitions formed around certain policy issues on the basis of shared policy beliefs, and on how policy change is effected through the competition of the different advocacy coalitions. According to the Multiple Streams (MSs) approach (Kingdon, 1984), the policy process consists of a problem stream, a policy stream with potential solutions and a politics stream (public opinion, elections, etc.). Policy entrepreneurs are at times able to couple these independent streams and facilitate major policy change. The punctuated-equilibrium (PE) framework (Baumgartner and Jones, 1993; Sabatier, 2007) assumes that policy change is usually incremental but may at times be interrupted by sudden and radical changes, which usually occur when a policy issue moves from a lower policy subsystem to a higher stage. A final prominent example is institutional analysis and development (IAD) framework (Kiser and Ostrom, 1982; Sabatier, 2007), which aims to explain how institutional rules influence the behavior of actors in a given action arena. Of central importance are the connections between different action arenas and between the fundamental (e.g. constitutional policy) and the specific (e.g. day-to-day decisions) levels of the policy process.

Recently, researchers in health promotion have begun to incorporate some of these political science approaches into their own work.

For example, De Leeuw and Hoeijmakers *et al.* have developed a software tool for policy analysis based on policy network theory and the MS framework which is supposed to help actors in a given health promotion policy arena understand the dynamics of the networks they act in and thus improve their own advocacy strategies (De Leeuw, 2010; Hoeijmakers *et al.*, 2007). Breton *et al.* use Sabatier's AC framework to analyze the media coverage of policy issues and makes a case for grounding policy research and future advocacy interventions into theoretical frameworks (Breton *et al.*, 2008). Bryant has used an agenda setting approach (as outlined, among others, in the PE framework) to study the framing of the social determinants of health in the Canadian policy debate (Bryant, in preparation). And finally, Guldbrandsson and Fossum have investigated policy windows and the behavior of policy entrepreneurs in the Swedish public health arena, using an approach based on the MS framework (Guldbrandsson and Fossum, 2009).

Despite these efforts, we feel that there is still a need to expand the understanding of policy development and implementation processes in health promotion. In particular, there is a need for knowledge that could be utilized to improve the health promotion impact of existing projects. This knowledge might also allow us to optimize our efforts in the area of knowledge translation. In this regard, theoretical approaches with a comprehensive and efficient applicability within various types of health promotion projects are certainly of special interest.

This article intends to add to the discourse on health promotion policy processes by providing researchers and practitioners with a theory-based concept to assess determinants of policy impact. The ADEPT (analysis of determinants of policy impact) model presented in this article may be useful both to explain successes and failures of health promotion policy processes under investigation (i.e. in a 'retrospective' way) and to develop successful strategies for the implementation of certain health promotion policies (i.e. 'prospectively').

## THE ADEPT MODEL

In an attempt to explain the basic mechanisms underlying individual human behavior, the Finnish philosopher Georg Henrik von Wright

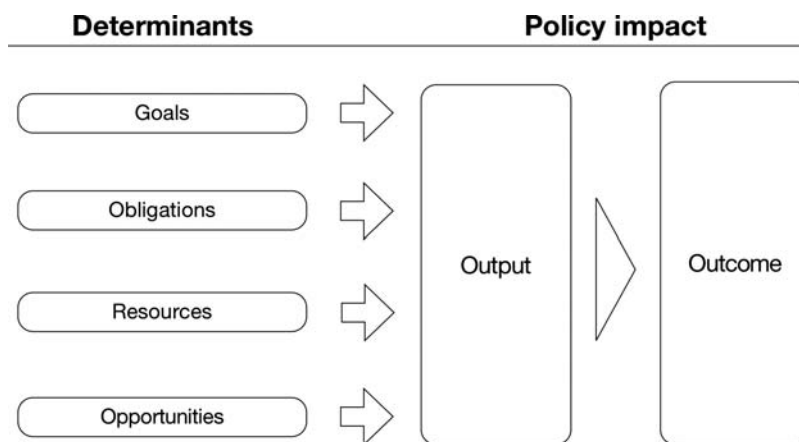
developed a theory about the factors that determine human action and about the logic that underlies the interaction of these factors (von Wright, 1976). He identifies four rather straightforward ‘determinants’ that influence an individual’s intention to act: wants, duties, abilities and opportunities. Central to the theory is the interplay between these four determinants with their different characteristics, which von Wright calls *logic of events*: ‘As the situations change, creating new opportunities for action, intentions articulate under the already existing wants and duties and within the frame of given abilities’ (von Wright, 1976). In addition, every action creates new situations (i.e. opportunities) that may, in turn, trigger subsequent events.

The ADEPT model is an adaptation of von Wright’s original theory to the field of health promotion policy. This adaptation was developed by the MAREPS project (‘Methodology for the Analysis of the Rationality and Effectiveness of Prevention and Health Promotion Strategies’) that was funded by the Biomed II Programme of the European Commission between 1996 and 2000 (Rütten *et al.*, 2000a,b, 2003a,b).

In order to be able to apply von Wright’s approach to the organizational/policy level, the determinants had to be ‘translated’ from the individual to the collective level first, as in the context of policy action the determinants develop a more complex collective meaning (Rütten *et al.*, 2000a). For example, one no longer can consider only policy-makers’ personal wants but also has to consider the wants of their organizations (e.g. parties, ministries,

municipal authorities, NGOs). Consequently, ADEPT employs the term *goals* instead of wants. Similarly, duties become *obligations* that include both policy-makers’ professional duties and institutional arrangements of the policy system and the community affected by that system. Abilities are translated into *resources* reflecting policy-makers’ individual abilities as well as the capacities of their organizations (e.g. personnel, finances). ADEPT retains the term *opportunities* but distinguishes three different subtypes: organizational opportunities that arise from internal changes in organizations (e.g. new decision structures or actors), political opportunities arising from external changes in political and inter-organizational settings (e.g. changes in the responsibilities of different political levels) and public opportunities that emerge from external changes in public awareness, engagement of the population or mass media interest. Finally, different phases of the policy process can be conceived of as ‘dependent variables’ in the ADEPT model, in particular policy development, policy implementation and potential *policy impact*. Policy impact, in turn, is considered to consist of policy output (i.e. the actions taken on the policy level) and outcome (i.e. the health effects on the population level). Figure 1 gives an overview of the full ADEPT model.

The ADEPT model aims to bridge the gaps between theory, research and practice in health promotion. In order to achieve this, it also provides an operationalization of the four determinants. The MAREPS project first developed a



**Fig. 1:** The ADEPT model.

quantitative questionnaire consisting of 35 items using a 5-point Likert answer scale. Categories ranged from 1 (not true at all) to 5 (definitely true) for goals, obligations and resources, and from 1 (situation has worsened) to 5 (situation has improved) to measure the change of opportunities over the last 12 months. Following the empirical test of the model (see next section), a Cronbach alpha analysis was conducted, resulting in the final set of 20 items loading on 6 factors as reported in Table 1 (Rütten *et al.*, 2000a). Recently, this original questionnaire has been complemented by a

short version of 14 quantitative items, developed by the EUNAAPA project and by semi-structured interview guidelines used for the PASEO project (for both see below).

## APPLICATIONS OF THE ADEPT MODEL FOR POLICY ANALYSIS

Since its development, ADEPT has been empirically tested and applied in a number of policy analysis and policy development projects. The MAREPS project conducted a statistical test of the model based on interviews by written questionnaire with 719 policy-makers from six European nations. Respondents were selected via a focused sampling procedure and were active in one of four different health promotion policy areas: early detection of breast cancer, prevention of smoking, promotion of physical activity and creation of supportive environments. The four determinants, goals, obligations, resources and opportunities, served as independent variables, while the dependent variable was health policy impact, measured via policy-makers' self-assessment of three items on policy outcome and one item on policy output (see Table 1). Correlation coefficient analysis (Pearson coefficients,  $p < 0.01$ ) showed that obligations toward the health of the population, personal/professional commitment and organizational opportunities (e.g. improvement of co-operation within organizations) are determinants of policy output. The outcome of policies is determined by the concreteness of goals, the availability of sufficient resources and public opportunities such as increasing support from the population and the media (Rütten *et al.*, 2003b).

In the EUNAAPA project ('European Network for Action on Ageing and Physical Activity'), ADEPT was used to assess existing policies in the area of physical activity promotion among older people. 248 interviews with policy-makers in 15 European nations were conducted, using an abbreviated version of the original quantitative questionnaire that had been reduced to 14 items through principal component analysis. Results indicated pronounced differences in the perceptions of policy-makers from different sectors and nations regarding goals, resources, obligations and opportunities for physical activity promotion among older people. For example, goals were rated most favorably by policy-makers

**Table 1:** List of items operationalizing ADEPT

Items
Policy determinants
Goals
The goals are officially spelled out
The goals are concrete enough
The action centers on improving the health of the population
Obligations
Personally I feel obliged to do something in this field
The action is part of my professional duties
Scientific results demand the action
We are obliged to the population to act in this area
Resources
There is enough personnel
My organization has the necessary capacities
There are sufficient financial resources
Organizational opportunities
My own involvement has worsened/improved
The co-operation within my organization has worsened/improved
Political opportunities
The political climate has worsened/improved
The support from other sectors has worsened/improved
The co-operation between political levels involved has worsened/improved
The co-operation between public and private organizations has worsened/improved
The lobby for the action has worsened/improved
Public opportunities
The involvement of the population has worsened/improved
The population supports the action
The media's interest has worsened/improved
Policy impact
Outcome
The action has achieved the intended behavior change in the population
Considering cost-benefits, the action was worthwhile
Personally I am satisfied with the results
Output
Various programs were implemented

Source: Rütten *et al.*, 2000a: 73, 83.

from the sport sector (83%), while obligations were rated most positively by the health sector (81%). Comparing different nations, positive perceptions of obligations ranged from 94% of respondents in Finland to 56% in Italy, and while only 38% of policy-makers in Belgium believed that opportunities had improved during the last year, the share of positive responses was 84% in Poland (Rütten *et al.*, under review).

### APPLICATION OF THE ADEPT MODEL FOR POLICY DEVELOPMENT

At present, the PASEO project ('Building Policy Capacities for Health Promotion through Physical Activity among Sedentary Older People', 2009–11) uses ADEPT to assess existing policy capacities and to guide a planning process for capacity building. A total of 234 policy-makers were questioned in semi-structured qualitative interviews based on the ADEPT determinants model. For this, the Likert scales were removed from the short 14-item version of the quantitative questionnaire, and the questions were rephrased in an open-ended fashion. Project partners in 15 participating nations then set up national alliances for the promotion of physical activity among sedentary older people. The work of the alliances is based on the results of the qualitative interviews. In the German state of Bavaria, for example, the initial determinant analysis showed, among other things, that many state institutions from the healthcare sector as well as a number of healthcare and sport NGOs had a high level of obligations to become active in physical activity promotion for older people. This served as a starting point for further policy development (for further information, c.f. [www.paseonet.org](http://www.paseonet.org)).

The ADEPT approach was also adopted to assess prospectively the readiness of organizations to engage in health promotion implementation. In the first phase of the BIG project (BIG is the German acronym for 'Movement as an Investment for Health'), 21 qualitative in-depth interviews with representatives of governmental and non-governmental organizations were conducted. Project evaluation confirmed that organizations with a more favorable constellation of determinants (in particular, at least some extent of specified goals, allocated resources and perceived opportunities) were

more likely to get involved in BIG policy development/implementation (Rütten *et al.*, 2009).

### DISCUSSION

In our opinion, the ADEPT model is not inextricably linked to one of the major frameworks on the policy process (Sabatier, 2007), but there are connections to some of these approaches, in particular to the IAD framework. Both ADEPT and IAD are actor-centered, both assume a certain degree of rationality and predictability of actions, and both allow for actors to be either individual or collective. However, the IAD model has a number of limitations with respect to its practical applicability. First, due to its very character as a framework, many of its concepts must naturally remain comparatively general and unspecific, making it somewhat difficult for practitioners to apply and operationalize them. Second, while it is a very powerful approach for policy analysis, it does not lend itself easily to being used for policy development. The IAD framework does not put quite as much emphasis on the dynamics of the policy-making process as other approaches. ADEPT addresses this problem by introducing the determinant of 'opportunities'.

ADEPT conceptualizes *organizational opportunities* (e.g. new decision structures or actors within organizations), *political opportunities* (e.g. the political climate, cooperation between the different political sectors and levels and public-private partnerships) and *public opportunities* (e.g. public support and media interest). In this regard, it has certain overlaps with the MS framework and the PE framework. For example, the emergence of opportunities could be conceived of as times when the problem stream, the politics stream and the policy stream are coupled, i.e. when a policy window opens (MS).

In addition, there are links between ADEPT and the ACF: The first one pertains to policy analysis. ACF focuses, in its core considerations, on the policy subsystem and on how coalitions within this subsystem interact. The broader framework, however, also considers external events (e.g. changes in public opinion, policy decisions and impacts from other subsystems), which are perceived as crucial dynamic factors determining policy-making within the subsystem. The opportunities category of ADEPT focuses exactly on these factors. The second

parallel pertains to the application of ADEPT in policy development. Within the ACF, one path to policy change refers to negotiated agreements. Sabatier lists nine propositions on how negotiations toward policy change can be conducted successfully. We consider most of these propositions in our own policy development projects by employing a cooperative planning process, which is based on the analysis of policy determinants following the ADEPT model, and which addresses issues of coalition building.

We are aware that ADEPT has a number of limitations. For one, it is not a model of the entire policy-making process but instead focuses on selected aspects (c.f. Breton and De Leeuw, forthcoming). While ADEPT is not limited to specific stages of the policy process, it has so far been mainly used to analyze policy implementation. The main investigative focus is the policy impact of different actors within a given action arena; the relations between these actors, however, are not the main concern of the model.

The ADEPT model implies a causality between the four determinants and both output and outcome. The results of the MAREPS study indicate that there is indeed a causal relationship between some of the determinants and output on the one hand, and between a different set of determinants and outcome on the other. However, the results do not show that the four determinants have a linear policy impact by first influencing output and, in a next step, reaching an outcome, as may also be implied by Figure 1. This might reflect two different sets of limitations: The first pertains to the MAREPS study, in particular to how the ADEPT model was applied. For example, while there is an item explicitly used to measure output ('various programs have been implemented'), the items on outcome also contain a reference to the outputs ('action') generated. As a consequence, it can be assumed that in all cases where policy-makers reported outcomes, some kind of output had been generated, too. The results of the MAREPS study may also be biased by the fact that the analysis is based on the perceptions of policy-makers. Policy-makers with a set of determinants that only lead to outputs might also be more geared toward outputs in their perceptions, while policy-makers with determinants that generate outcomes might focus more on outcomes. A second set of limitations may refer to the general approach of causality used in the ADEPT model. It should be noted here that the

causality between certain determinants and policy impact suggested by ADEPT does not imply that the entire policy process is linear or follows a pre-determined sequence of stages. Even though certain constellations of determinants increase the likelihood of generating policy impact, policy processes may still involve complex interactions, multiple overlapping cycles and even backlashes.

In addition, we have identified some difficulties pertaining to the empirical testing and practical application of ADEPT. First, when attempting to measure the policy determinants of a multi-member organization, one is usually forced to employ the '*pars pro toto*' principle, trying to identify a small number of people in key positions that can give a realistic assessment of the determinants of the entire organization. The alternative would be to survey the entire organization, which will be neither possible nor feasible in most cases. Second, although empirical testing has shown the items used to operationalize the determinants work well, there is nevertheless room for improvement and refinements. Our experience with the model over the last years indicates that the addition of new items as well as the re-formulation of some existing ones might be useful. Such a task, however, is not easily tackled and might require follow-up research projects.

## CONCLUSION

Despite the limitations discussed above, we believe that the ADEPT approach might contribute to improve policy analysis and policy development in health promotion in various ways. For one, ADEPT is theory-driven as it both identifies a set of major 'causal drivers' (determinants) that influence policy-making and describes the mechanisms based on which these factors interact (logic of events) to influence policy impact (output and outcome). At the same time, it is more than just a theoretical aid to help us conceptualize reality in our minds: Its operationalization, both quantitative and qualitative, allows us to measure the determinants and to test the model as a whole. Empirical analysis and application in MAREPS and other projects have shown that ADEPT actually works. Another advantage of the model is its parsimony. The limitation to just four determinants ensures that the model is easy to use and

can be applied not only by scientists but also by practitioners. In addition, due to its simplicity, ADEPT may be used for cross-national comparisons or development efforts, as the four determinants can be assumed to operate under a broad range of political and societal environments. Adding to the usability of ADEPT is the fact that it can be used both for policy analysis ('retrospectively') and for policy development ('prospectively'). Finally, the model has a high degree of 'theoretical flexibility': It is connected to various frameworks of the policy process without being bound exclusively to any of them, allowing it to be used within various general approaches to policy-making.

A final issue that we regard to be of importance is the usefulness of ADEPT for health promotion policy development. Regardless of how helpful it may be to analyze policy, any given approach on the policy process only can be of practical value to health promotion policy development if it actually aids actors to influence the policy process. Some frameworks do not leave much theoretical leeway for bringing about change (e.g. IAD). The four determinants of policy impact defined by ADEPT might be regarded as four important 'levers of influence' for policy development. For example, in the EUNAAPA project, policy analysis indicated that in some countries, ministries of health, of sport and of family affairs had overlapping competences in the field of physical activity promotion for older people, resulting in an insufficient specification of policy goals in either of these ministries. Defining more specific goals in a process of mutual adjustment thus could be suggested as a first concrete step for these organizations to develop policy in this field. Similarly, the initial determinant analysis conducted for the German state of Bavaria in the PASEO project showed, among other things, that many state institutions from the healthcare sector as well as a number of healthcare and sport NGOs had a high level of obligations to become active in physical activity promotion for older people. This served as a starting point for further policy development. Potentially, ADEPT might be coupled with various existing methods of community development (Rifkin *et al.*, 2000) or capacity building (NSW Health Department, 2001) to increase its impact. In our own implementation projects, the assessment of determinants via ADEPT was usually followed by a cooperative planning

process involving representatives of all major actors (the population or the relevant subgroups, civil society, policy-makers, practitioners, experts) and encompassing a series of pre-structured meetings to reach consensus on the appropriate measures to be taken and on how to implement them.

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